# Work Order ID 86603

*Thursday, July 05, 2012 2:24:28 PM*

*86603*



**Item ID:** D3796-043 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:**

**Item Name:** AFT WEARPLATE WELDMENT **Stop** *NS2*

**Start Date:** 7/5/2012 **Start Qty:** 1.00 *1* **Cust Item ID:** PRELIMINARY ISSUE

**Required Date:** 7/12/2012 **Req'd Qty:** 1.00 *1* **Customer:**

**Reference:**

**Approvals:** **Process Plan:** MF **Date:** 12-07-04 **Tooling:** **Date:** **Run Start** *NR1*

**QC:** **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| **Draw Nbr** | **Revision Nbr** | | | | | | | | |
| D3796 | ~~Rev A~~ PBI | | | | | 1 | | | |
| 100 | | 0.00 | | | | | | | |
| *100* Waterjet | FLOW WATER JET | | | | | | | | PB 12-7-6 |
| FLOW CNC Waterjet | **Memo** | 0.00 | | | | | | | |
| 3d4.063 | 1-Cut as per Dwg D3796 Dwg Rev: ~~A~~ PBI Prog Rev: ~~A~~ 2-PBI<br>Deburr if necessary | | | | | | | | |
| 110 | QC2- Inspect parts off machine FAI/FAIB | 0.00 | | | | | | | |
| *110* QC | **Memo** | 0.00 | | | | | | | PB 12-7-6 |
| Quality Control | | | | | | | | | |
| 120 | QC8- Inspect parts - second check | 0.00 - inspected to PBI | | | | | | | |
| *120* QC | **Memo** | 0.00 Dry only 5/12/07 06 | | | | | | | |
| Quality Control | | | | | | | | | |

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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**NOTE:** Date & initial all entries

# Work Order ID 86603

*Thursday, July 05, 2012 2:24:28 PM*

*86603*



**Item ID:** D3796-043 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:** **Stop** *NS2*

**Item Name:** AFT WEARPLATE WELDMENT

**Start Date:** 7/5/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**

**Required Date:** 7/12/2012 **Req'd Qty:** 1.00 *1* **Customer:**

**Reference:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 130 | | 0.00 | | | | | | | |
| *130* | Large Fab | | | | | 1 | | | 12-07-17 |
| Large Fab | **Memo** | 0.00 | | | | | | | |
| Large Fab | Weld hardcoat (template DT9037) and cups as per dwg D3796 using DT9040 jig2059 hardcoat batch: M122279 304/316 S.S. ROD batch: M 114509 | | | | | | | | |
| 140 | QC9- Inspect visual per QSI004- Fusion Welds | 0.00 | | | | 1x | | 12.7.18 | DAS 24 8-83 |
| *140* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 150 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *150* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

- inspects to PB1 Dwg only. DAS 16 8-83

* PART is warped/twisted due to welding *
For production parts tooling MUST be made.
12/07/18

12/07/19

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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
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**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

# Work Order ID 86603

*Thursday, July 05, 2012 2:24:28 PM*

*86603*



**Item ID:** D3796-043 **Accept** *N900040100* **Setup Start** *NS1*

**Revision ID:** **Stop** *NS2*

**Item Name:** AFT WEARPLATE WELDMENT

**Start Date:** 7/5/2012 **Start Qty:** 1.00 *1* **Cust Item ID:**

**Required Date:** 7/12/2012 **Req'd Qty:** 1.00 *1* **Customer:**

**Reference:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run Start** *NR1*

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 160 *160* Powdercoat Powder Coating | Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 | 0.00 | | | | | | | |
| | **Memo** START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____ | 0.00 | | | | | | | |
| 170 *170* QC Quality Control | QC3- Inspect Part Finish | 0.00 | | | | | | | |
| | **Memo** | 0.00 | | | | | | | |
| 180 *180* Packaging Packaging | Identify as per dwg & Stock Location:_____ | 0.00 | | | | | | | |
| | **Memo** | 0.00 | | | | | | | |

12.09.25

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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| | | | | | | | | |

**NOTE:** Date & initial all entries

# Work Order ID 86603

*Thursday, July 05, 2012 2:24:28 PM*

*86603*

**Item ID:** D3796-043

**Revision ID:**

**Item Name:** AFT WEARPLATE WELDMENT

**Start Date:** 7/5/2012 **Start Qty:** 1.00 *1*

**Required Date:** 7/12/2012 **Req'd Qty:** 1.00 *1*

**Reference:**

**Accept** *N900040100*

**Setup Start** *NS1*

**Stop** *NS2*

**Cust Item ID:**

**Customer:**

**Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

**QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

**Run Start** *NR1*

**Stop** *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|---|---|---|---|---|---|---|---|
| 190 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | **Memo** | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

POSITIVE RECALL

EFFECTIVE _____ AUTH _____

RELEASED _____ DATE _____

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

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**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

# Picklist Print

*Thursday, July 05, 2012 2:24:27 PM*



**Work Order ID:** 86603

**Parent Item:** D3796-043

**Parent Item Name:** AFT WEARPLATE WELDMENT

**Start Date:** 7/5/2012 **Required Date:** 7/12/2012

**Start Qty:** 1.00 **Required Qty:** 1.00

**Comments:** IPP Rev:A 08-08-05 new issue DD verified by:ec
IPP Rev:B 08-09-10 revA as per dwg (ecn 08-513) DD verified by:EC
IPP REV:C AS PER PB1 12-07-04 JLM VERIOFIED BY:DD

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **D4379-3** Wearplate Cup | | Manufactured | No | | | | Each | 0.0000 | | 386549 12 | | | |
| **M304S16GA** 304/316 Sheet .063 | | Purchased | No | | | 130 | sf | 161.9900 | 1.912 | 2.0126316 | | 12-7-6 | |

| Location | Loc Qty | Loc Code |
|---|---|---|
| MAT020 | 161.99 | |
| 122245 | 161.99 | |

122245

1

Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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**NOTE:** Date & initial all entries

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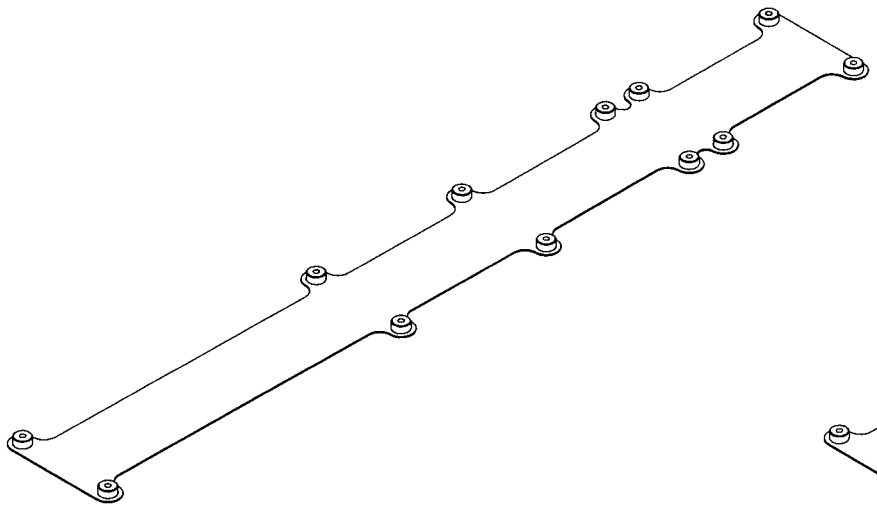
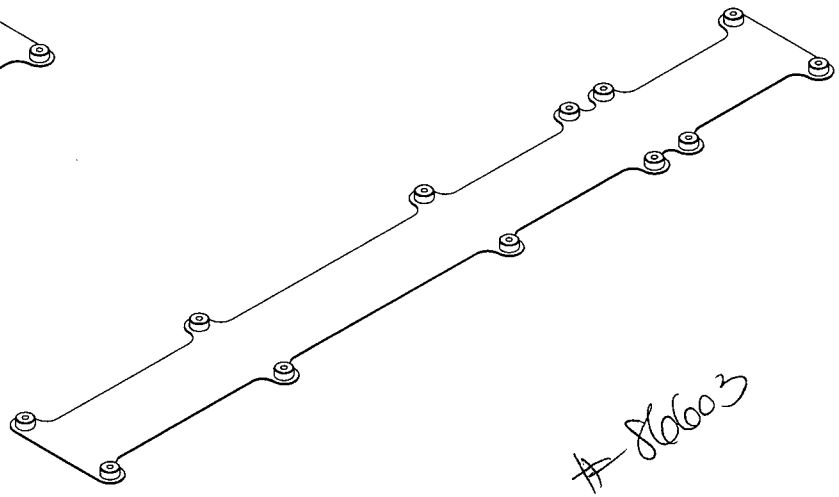


**D3796-041 FWD WEARPLATE WELDMENT**




**D3796-043 AFT WEARPLATE WELDMENT**

PRELIMINARY B1
12.07.04 (AP)

| REV. | DESCRIPTION | BY | DATE |
|---|---|---|---|
| PB1 | REPLACED D3009-3 CUP WITH D4379-3 WEARPLATE CUP | AP | 12.07.04 |
| A | NEW ISSUE | MB | 08.08.01 |

| | | |
|---|---|---|
| DESIGN | MB | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | AP | |
| CHECKED | | DRAWING NO. D3796 — REV. PB1 — SHEET 1 OF 4 |
| MFG. APPR. | | |
| APPROVED | | TITLE 412 SKI WEARPLATE — SCALE NTS |
| DE APPR. | | |
| DATE | 12.07.04 | |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

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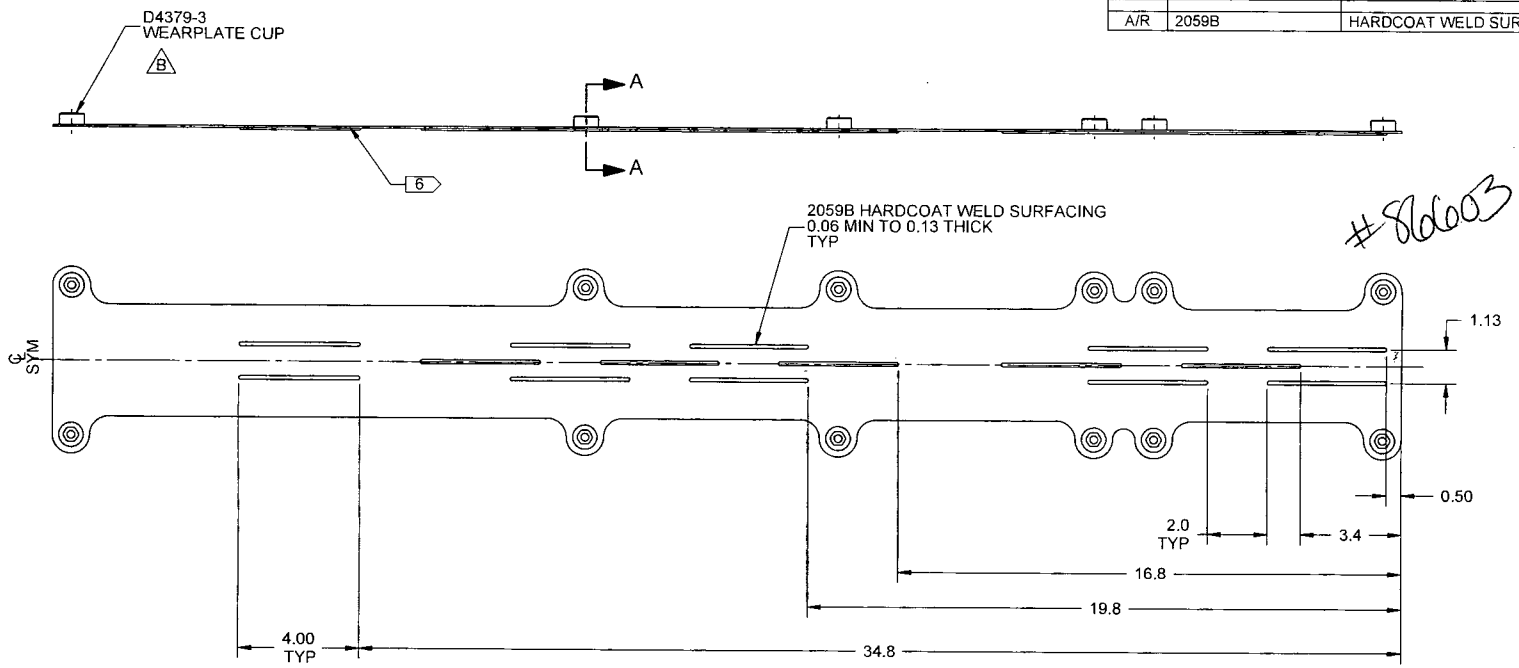
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

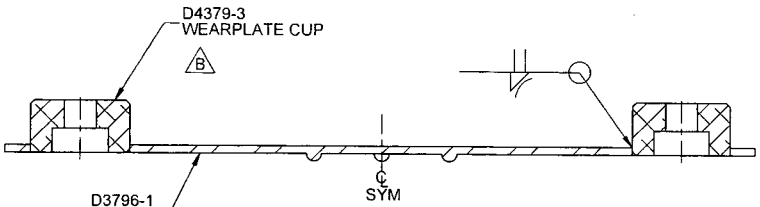
**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

| QTY -041 | P/N | DESCRIPTION |
|---|---|---|
| X | D3796-041 | FWD WEARPLATE WELDMENT |
| | | |
| 1 | D3796-1 | FWD WEARPLATE |
| 12 | D4379-3 | WEARPLATE CUP |
| | | |
| A/R | 2059B | HARDCOAT WELD SURFACING |




**D3796-041 FWD WEARPLATE WELDMENT**




**SECTION A-A** D5-2
SCALE 4X, TYP

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT "GREY" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-041" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER PER QSI 044
7) WEIGHT: 4.00 lbs
8) WELD PER DART QSI 004

PRELIMINARY B1
12.07.04 (AP)

| | | |
|---|---|---|
| DESIGN | MB | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | AP | |
| CHECKED | | DRAWING NO. D3796 — REV. PB1 — SHEET 2 OF 4 |
| MFG. APPR. | | |
| APPROVED | | TITLE 412 SKI WEARPLATE — SCALE NTS |
| DE APPR. | | |
| DATE | 12.07.04 | |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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**NOTE:** Date & initial all entries

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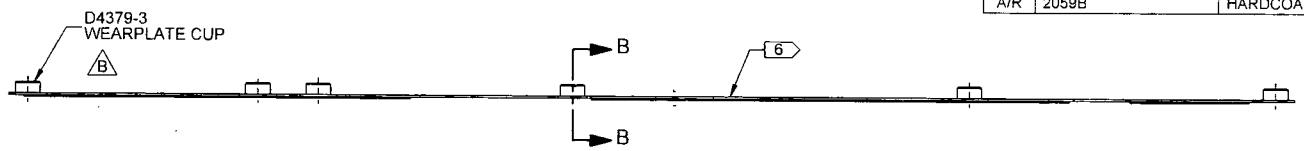
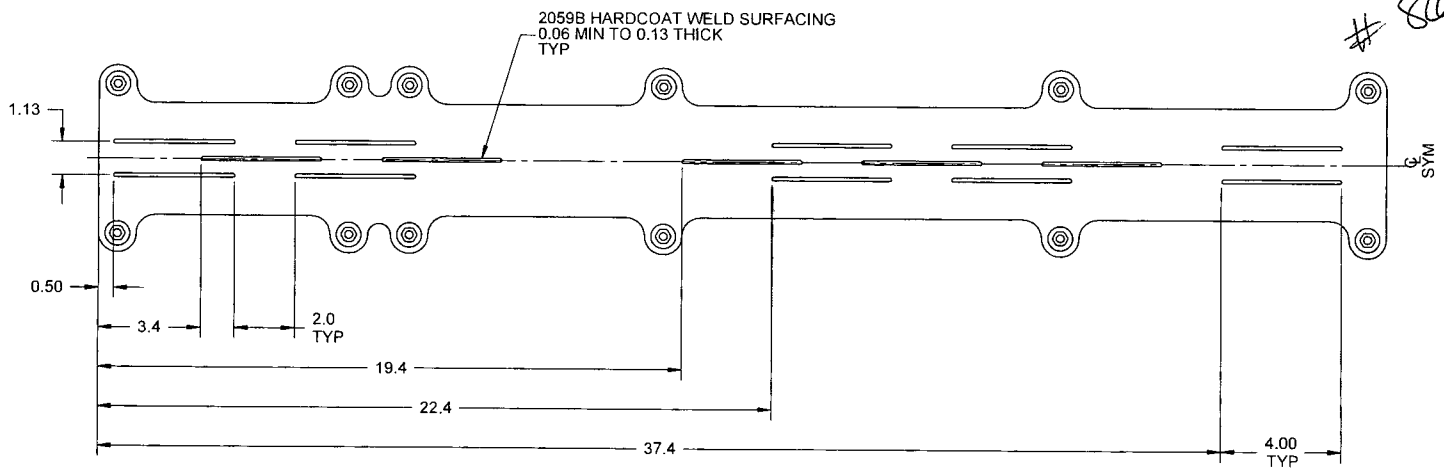
| QTY -043 | P/N | DESCRIPTION |
|---|---|---|
| X | D3796-043 | AFT WEARPLATE WELDMENT |
| 1 | D3796-3 | AFT WEARPLATE |
| 12 | D4379-3 | WEARPLATE CUP |
| A/R | 2059B | HARDCOAT WELD SURFACING |

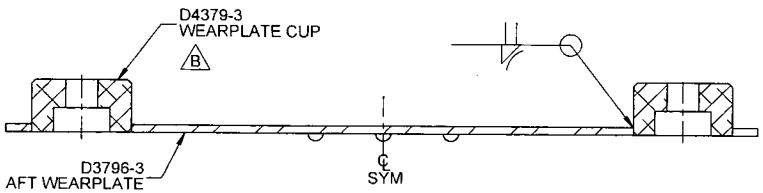



# 86603




**D3796-043 AFT WEARPLATE WELDMENT**

PRELIMINARY B1
12.07.04 (AP)




**SECTION B-B** D5-3
SCALE 4X, TYP

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT "GREY" (4.3.5.6) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3796-043" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER PER QSI 044
7) WEIGHT: 3.86 lbs
8) WELD PER DART QSI 004

| | | |
|---|---|---|
| DESIGN | MB | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | AP | |
| CHECKED | | DRAWING NO. D3796 — REV. PB1 — SHEET 3 OF 4 |
| MFG. APPR. | | |
| APPROVED | | TITLE 412 SKI WEARPLATE — SCALE NTS |
| DE APPR. | | |
| DATE | 12.07.04 | |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
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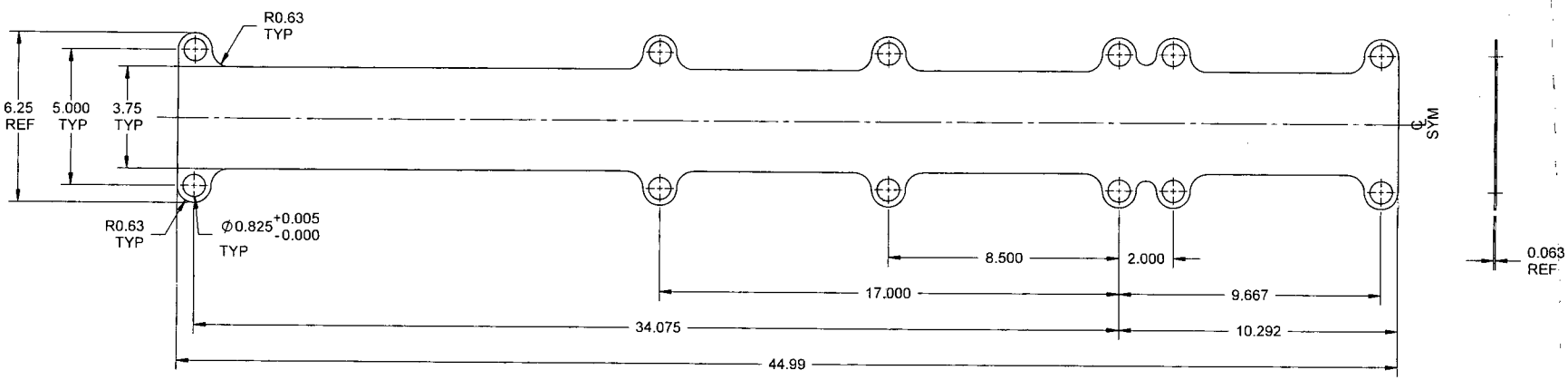
| | | | | | | | | |

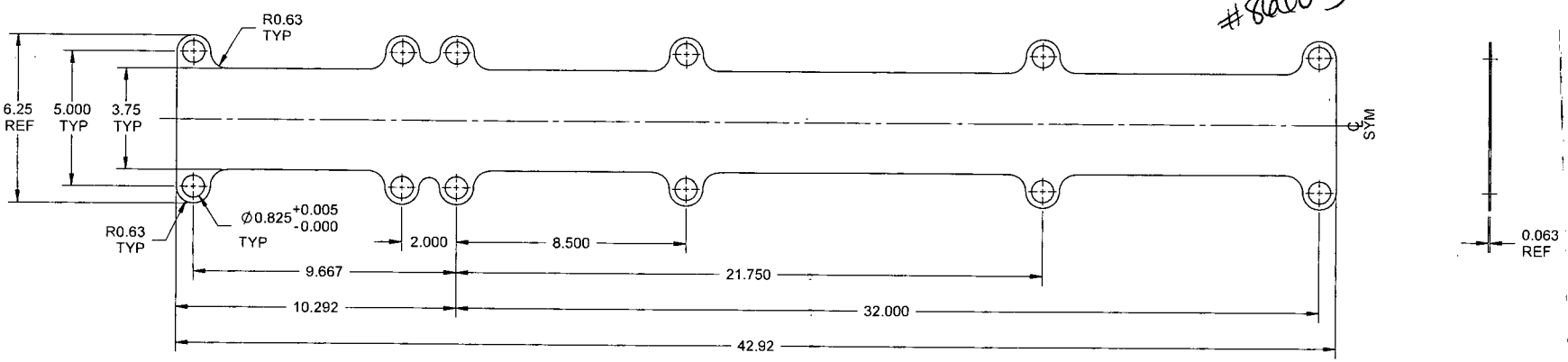
**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE




**D3796-1 FWD WEARPLATE**

#86003




**D3796-3 AFT WEARPLATE**

NOTES:
1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET,(ANNEALED) 2B FINISH, 16 GAUGE (0.063 THICK) PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240, REF. DART SPEC. M304S16GA
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: NONE
7) WEIGHT: D3796-1 = 3.37 lbs
D3796-3 = 3.11 lbs

PRELIMINARY B1
12.07.04 (AP)

| | | |
|---|---|---|
| DESIGN | MB | **DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA |
| DRAWN | AP | |
| CHECKED | | DRAWING NO. D3796 — REV. PB1 — SHEET 4 OF 4 |
| MFG. APPR. | | |
| APPROVED | | TITLE 412 SKI WEARPLATE — SCALE NTS |
| DE APPR. | | |
| DATE | 12.07.04 | |

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Dart Aerospace Ltd

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**Resolution:** _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**NOTE:** Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevE

| DART AEROSPACE LTD | | Work Order: | 86603 |
|---|---|---|---|
| | | | |
| Description: | AFT WEAR PLATE WELDMENT | Part Number: | D3796-043 |
| | | | |
| Inspection Dwg: D3796-3 Rev: ~~A~~ PB1 | | | Page 1 of 1 |

## FIRST ARTICLE INSPECTION CHECKLIST

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|---|---|---|---|---|---|---|
| Ø .825 | +.005 -.001 | .828 | 2 | | V HBOZ | |
| 2.000 | ±.010 | 2.000 | 2 | | V | |
| 3.75 | ±.030 | 3.752 | 2 | | V | |
| 5.000 | ±.010 | 4.998 | 2 | | V | |
| 6.75 | ±.030 | 6.735 | 2 | | V | |
| 9.667 | ±.010 | 9.667 | 2 | | T BOX | |
| 8.500 | ±.010 | 8.500 | 2 | | T | |
| 10.795 | ±.010 | 10.795 | 2 | | T | |
| 21.756 | ±.010 | 21.756 | | | T | |
| 37.000 | ±.010 | 37.00 | 2 | | T | |
| 47.62 | ±.030 | 47.97 | 2 | | T | |
| .063 | ±.010 | .058 | 2 | | V | |
| | | | | | | |
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| Measured by: | B | Audited by: | S | Preliminary Approval: | |
|---|---|---|---|---|---|
| Date: | 12-7-6 | Date: | 17/07/06 | Date: | |

to PB1 Dugally

| Rev | Date | Change | Revised by | Approved |
|---|---|---|---|---|
| E | 10.04.14 | Added preliminary approval | KJ | |

# Receiving Report

Date: 12/4/29

Batch No: M122245

Supplier: CAMPI

Dart P/O: 17251

Packing Slip: Yes ✓ No ___

Invoice: Yes ___ No ✓

Receipt: Cash ___ Cr ✓

Release Note Attached: Yes ✓ No ___ N/A ___

Waybill Attached: Yes ___ No ✓

Shipment Complete: Yes ✓ No ___ N/A ___

QC6 Inspection JL ✓ N/A ___

Work Order ___ N/A ✓

Discrepancies

| Part Number | Description | Quantity Ordered | Quantity Received | Quantity Returned | Quantity Short | Comments |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |

Initials of receiver (if shipment OK) Level 12 ✓

Production/Admin: Date 12/4/29

Received/Costing ___

Initial ✓

Location ___

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

# Purchase Order Receipt Listing

*Friday, June 29, 2012 7:36:52 AM*

All amounts are calculated in domestic currency.

All Vendors PO ID PO17251 Receipt Dates from 6/29/2012 to 6/29/2012 All Line Item Types
All Item ID/GL/WOs All Rec. Employees All Currencies
Grouped by Vendor ID

| Purchase Order ID/ Curr Type | Line Nbr/ Insp Req | Project ID | Reference/ Description/ Cert Std | PO U/M / Stock U/M | Required Date Required Qty | Recv Date/ Recv Emp | Recv Qty (PO U/M) | Cost Per Unit/ Recv Value | Inspected Qty/ Rejected Qty (PO U/M) | MRB Qty/ MRB Reject Qty | Book Amt |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **VendorID\Vendor Name** | | | **VC-CAM002** | **Campi Steel** | | | | | | | |
| PO17251 | 1 | | M303B1.000X2.000 | f | 6/27/2012 | 6/29/2012 | 12.0000 | $52.08 | 0.0000 | 0 | $625.00 |
| CAD | No | | 303 BAR 1" X 2" | f | 12.0000 | DESJ02 | | $625.00 | 0.0000 | 0 | |
| | | | 122245 | | | | | | | | |
| | 2 | | M304S16GA | sf | 6/22/2012 | 6/29/2012 | 320.0000 | $6.29 | 0.0000 | 0 | $2,012.59 |
| | No | | 304/316 Sheet .063 | sf | 320.0000 | DESJ02 | | $2,012.59 | 0.0000 | 0 | |
| | | | 122245 | | | | | | | | |
| | 3 | | M304B0.750X2.500 | f | 6/22/2012 | 6/29/2012 | 24.0000 | $26.38 | 0.0000 | 0 | $633.12 |
| | No | | 304 BAR .750 X 2.50 | f | 24.0000 | DESJ02 | | $633.12 | 0.0000 | 0 | |
| | | | 122245 | | | | | | | | |
| | 4 | | M6061T6B2.000X02.250 | f | 6/27/2012 | 6/29/2012 | 12.0000 | $14.30 | 0.0000 | 0 | $171.61 |
| | No | | 6061-T6 Bar 2.00 x 2.25 | f | 12.0000 | DESJ02 | | $171.61 | 0.0000 | 0 | |
| | | | 122245 | | | | | | | | |

| | |
|---|---|
| **Total Received Quantity:** | 368.0000 |
| **Total Qty to Inspect (PO U/M):** | 0.0000 |
| **Total Reject Quantity:** | 0.0000 |
| **Total Receipt Value:** | $3,442.31 |
| **Total Balance Due Quantity:** | 0.0000 |

ACIER CAMPI STEEL
935, boul. du Havre
Valleyfield (Québec)
J6S 5L1

TÉLÉPHONE : 450 377-4248
FAX : 450 377-5698

MONTRÉAL : 514 336-4248
FAX : 514 336-4246

ONTARIO : 1 800 667-4248
FAX : 1 866 456-4242

DISTRIBUTEUR D'ACIER ET MÉTAUX SPÉCIALISÉS
STEEL AND SPECIALTY METALS DISTRIBUTOR

*On a du Savoir "FER"*

VENDU À / SOLD TO:

613-632-5200 613-632-1053

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY,
ONTARIO
K6A 1K7

EXPÉDIEZ À / SHIP TO:

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY,
ONTARIO
K6A 1K7

COMMANDE / ORDER N° 200826

DATE 19/06/12

BON DE LIVRAISON / PACKING SLIP N°

DATE DE LIVRAISON / DELIVERY DATE 27/06/12

| VOTRE N° DE COMMANDE / YOUR P.O. N° | VEND. / SALESM. | CODE CLIENT / CUST. CODE | EXPÉDIÉ PAR / SHIP VIA | TERMES / TERMS | TERR. | REMARQUES / REMARKS | PAGE N° |
|---|---|---|---|---|---|---|---|
| 4P017251 | Y | DAER | | NET 30 JOURS | 2R | | 001 |

| CODE DE PRODUIT / PRODUCT CODE | COMMANDÉ / ORDERED | EXPÉDIÉ / SHIPPED | DESCRIPTION | POIDS / WEIGHT | PRIX / PRICE | PAR / PER * | MONTANT / AMOUNT |
|---|---|---|---|---|---|---|---|
| | | | **MILL TEST REQUIS** | | | | |
| | 12 | | FLAT SS-303 1" X 2"<br>1 X 12' R/L | 12.00 | | | |
| PSS4816G | 10 | | HEAT: 255128<br>S.S. 304 2B 16 JA 48 X 96 | 840.00 | | | |
| | | | 10 X 4' X 8'<br>HEAT : 871188 | | | | |
| | 24 | | FLAT SS-304 3/4" X 2 1/2"<br>2 X 12' R/L | 24.00 | | | |
| | 12 | | HEAT : 560632<br>FLAT ALU 6061-T6 | 12.00 | | | |
| | | | 2" X 2 1/2"<br>1 X 12' R/L | | | | |
| | | 12/6/29 | HEAT : Z00168036 | | | | |

* Unités de mesure : / Units of measure: CLB Centièmes / Hundred pounds • CPI Centipieds / Hundred feet • UN Unité / Unit • PI Pied / Foot • PC Pied carré / Square foot

POIDS TOTAL / TOTAL WEIGHT 888

LES MATÉRIAUX LIVRÉS ET FACTURÉS TELS QUE DÉCRITS DEMEURENT LA PROPRIÉTÉ DE "ACIER CAMPI INC." JUSQU'À PAIEMENT INTÉGRAL COMPLET ENCAISSÉ • LES RISQUES DE PERTES OU BRIS SONT À LA CHARGE DE L'ACHETEUR. • LA GARANTIE DE QUALITÉ DU MATÉRIEL EST LA MÊME QUE CELLE DU FABRICANT. • L'ACHETEUR S'ENGAGE À RESPECTER LES CONDITIONS SUIVANTES : NET 30 JOURS DE LA DATE DE FACTURATION, ET TOUT COMPTE ENVOYÉ DANS LES 30 JOURS ENTRAÎNE DES FRAIS DE 2% PAR MOIS (24% PAR ANNÉE) DU MONTANT DÛ. • TOUT MANQUE DE PAIEMENT À LA DATE DU TERME DES OBLIGATIONS ENTRAÎNERA DU PAIEMENT COMPTANT, ENTRAÎNE LA MARCHANDISE DU VENDEUR EST PÉRIMÉE AU VENDEUR, À SON CHOIX, DE RÉCLAMER TOUT SOLDE DU PRIX DE VENTE OU REPRENDRE LE BIEN VENDU. • TOUTE RÉCLAMATION DOIT ÊTRE FAITE DANS LES CINQ JOURS SUIVANT LA PRÉSENTATION DU DOCUMENT • TOUTE MARCHANDISE RETOURNÉE, ACCEPTÉE OU NON, DOIT ÊTRE TRANSPORTÉE. • AUCUN RETOUR DE MARCHANDISE NE SERA ACCEPTÉ SANS NOTRE AUTORISATION. • TOUTE MARCHANDISE RETOURNÉE EST SUJETTE À DES FRAIS DE MANUTENTION DE 25%.

**CONDITIONS:**

ALL SOLD AND DELIVERED MATERIALS REMAIN THE PROPERTY OF "ACIER CAMPI INC." UNTIL PAYMENT IS MADE IN FULL, COMPLETE AND CASHED. ALL LOST MATERIALS ARE AT THE BUYERS EXPENSE. • ALL MATERIALS BEAR THE SAME WARRANTY AS GIVEN BY THE MANUFACTURER. THE BUYER HEREBY ACCEPTS TO RESPECT THE FOLLOWING CONDITIONS: NET 30 DAYS FROM BILLING DATE AND THE BUYER ACCEPTS TO PAY ACCOUNTS EXCEEDING THIRTY DAYS OF 2% PER MONTH (24% PER ANNUM) ON ALL PAST DUE ACCOUNTS OVER 30 DAYS. • ANY DEFAULT IN RESPECT WITH THE TERMS OF THE PAYMENT BY ACCELERATION AND PERMITS TO THE SELLER, AT THE CHOICE TO CLAIM FOR THE BALANCE DUE OR THE RETURN OF THE PRODUCT SOLD. • ANY CLAIM MUST BE MADE WITHIN FIVE DAYS WITH THIS DOCUMENT DISCLOSED. • ANY MERCHANDISE THAT HAS BEEN ACCEPTED, OR NOT, CANNOT BE RETURNED. • ALL GOODS RETURNED MUST BE WITH OUR AUTHORIZATION AND ARE SUBJECT TO A 25% RESTOCKING CHARGE.

MARCHANDISE REÇUE EN BONNE CONDITION / MERCHANDISE RECEIVED IN GOOD CONDITION

X

A/Y M/M J/D

| PRÉPARÉ / PREPARED | VÉRIFIÉ / VERIFIED | LIVRÉ / DELIVERED | HEURE / TIME |
|---|---|---|---|
| PAR / BY | PAR / BY | PAR / BY | |

SOUS-TOTAL / SUB TOTAL

T.P.S. / G.S.T.

T.V.Q. / T.V.H. / Q.S.T. / H.S.T.

**TOTAL**

Invoice: ACIER CAMI INC. Ord #: 1305951 Part #: 511235 Cust PO#: 52504

# Acciaierie Valbruna s.p.A.

38100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Kunde / Client:
VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
46801-FORT WAYNE, IN 46801-US

Produttore: ACCIAIERIE VALBRUNA S.P.A.

Stato di tornitura: - Annealed Cold Drawn

511235

Avviso di Spedizione: D-VI11036696

Ordine nr: 31688 STOCK CAROL STR

Tipo di Elaborazione: E+AOD

R 71787

## CERTIFICATO DI COLLAUDO
## ABNAHMEPRUEFZEUGNIS
## INSPECTION CERTIFICATE
## CERTIFICAT DE RECEPTION
## EN 10204 (2004) , 3.1

Certificato nr: MEST130833/2011/

Conferma ordine nr: EI11009278

Marchio di Fabbrica:

Punzone del Collaudatore:

Specifiche:
VSI 0 303 A,CF
ASME SA320 2010 BsF (0)
ASTM A370 2011 .
QQ-S-764 B/2 303 A

AMS 5640 U S30300 A
ASTM A314 2009 S30300
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A
ASTM A320 2011 BsF (1)
MIL-S-862 B/1 303

(0) SEC.II PT.A 2010 EDITION
(1) Chemical analysis only.

(0) Chemical analysis only.

Qualità: 303

Marca: AU188Z/P

Punzonature: 303

| Pos. nr. | Oggetto | Dimensioni - in | Tolleranza | Lunghezza - in | Colata | Pezzi | Peso - LB | Lotto nr. |
|---|---|---|---|---|---|---|---|---|
| 0080 | Flat | 2,0000 x 1,0000 | 484-08 | 145 / 145 | 255128 | | 1.845 | 100302180 |

SL
12-06-29

TEST ALLO STATO DI FORNITURA

| TEST | Provetta mm | °F | | Snervamento Rp 0,2% k.s.i. | Snervamento | Resistenza Rm k.s.i. | Allungamento E 4d % | | Strizione % | RA % | Resilienza | | | Durezza HB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Valori richiesti 1 | | min max | | - | - | - | - | - | - | - | - | | | 140 255 | | |
| A | 12,5 | 68 | L | 78 | | 105 | | 37 | | 54 | | | | 242 | | |

| TEST | | min | max | |
|---|---|---|---|---|
| A | Grain size for ASTM E112 | | | 5 |

Mechanical properties according to ASTM A370.

## Analisi chimica

| Colata | C % | Si % | Mn % | Cr % | Mo % | Cu % | Ni % | Co % | P % | S % | Zr % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | min - max 0,150 | - 1,00 | 1,50 2,00 | 17,00 19,00 | - 0,60 | - 1,00 | 8,00 10,00 | - - | - 0,100 | 0,25 0,35 | - 0,400 |
| 255128 | 0,032 | 0,33 | 1,76 | 17,99 | 0,42 | 0,60 | 8,16 | 0,116 | 0,030 | 0,28 | 0,008 |

Produced without class I-II Ozone depleting substances.
Solution heat treated free from continuous carbide network.
Annealing temperature: 1940° F for 1 h/water.
Micro and macro etch test: OK
Material is DFARS Compliant

Sono state soddisfatte tutte le condizioni richieste

Controllo antimacolanza: OK

Controllo visivo e dimensionale: soddisfa le esigenze

Melted and manufactured in Italy  No welding or weld repair  Material free from Mercury contamination
We declare that the finished product is checked for radioactive contamination through Portal System when it leaves the production plant.
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1,.,4.3 by TUEV and LLOYD'S

| Vicenza,29/11/11 VC0069 (Mod. MCEX) | Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L'agent d'usine M.Rizzotto | Pagina - 1 di 2 |
|---|---|---|

# Acciaierie Valbruna S.p.A.

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

## CERTIFICATO DI COLLAUDO
## ABNAHMEPRUEFZEUGNIS
## INSPECTION CERTIFICATE
## CERTIFICAT DE RECEPTION
## EN 10204 (2004) , 3.1

Cliente / Kunde / Client:
VALBRUNA STAINLESS INC.
2400 TAYLOR STREET WEST
46801-FORT WAYNE, IN 46801-US

Produttore: ACCIAIERIE VALBRUNA S.P.A.
Hersteller / Producteur

Stato di fornitura: - Annealed Cold Drawn
Lieferzustand / Delivery state / Etat de livraison

Avviso di Spedizione: D-VI11036696
Lieferschein / Packing list / B.L.

Ordine nr: 31683 STOCK CAROL STR
Kunden / Your order / Commande

Tipo di Elaborazione: E+AOD
Erschmelzungsart / Melting process / Mode d'élaboration

Certificato nr: MEST130833/2011/
Prüfung / Inspection

Conferma ordine nr: EI11009278
Unser Auftrag / Our order / Notre ordre

Marchio di Fabbrica:
Fabrikmarke / Trademark / Sigle de l'usine produttrice

Firma del Collaudatore:
Stempel des Abnahmebeauftragten / Inspector's stamp / Empreinte de l'expert

Any act of tampering, modification, alteration, counterfeiting and/or falsification and/or any other action which modifies the contents of this test certificate shall constitute a violation of applicable civil and criminal laws. Acciaierie Valbruna shall protect its rights and interests before any competent court, authority and jurisdiction.

The supplied product conforms to requirements expressly requested by the purchaser and conforms to requirements specified by certified norms and standards. Should the product be used for more severe, critical and/or in any case different applications than those the material is generally intended for, any different and/or supplementary requirements shall be specifically demanded, at least, upon order of the Product by the Purchaser. Acciaierie Valbruna SpA shall not be responsible for any improper use of the Products.

JL

| | | |
|---|---|---|
| Vicenza,29/11/11<br>YDS308<br>(Mod. MS01) | Il collaudatore di stabilimento / der Werksachverständige / Works inspector / L' agent d' usine<br>M.Rizzotto | Pagina - 2 di 2 |

Herstellungsort / Manufacturer's works / Lieu de production

[redacted]

Art des Prüfbescheinigung / Type of inspection document / Type de reconnaissance

# ABNAHMEPRUEFZEUGNIS
INSPECTION CERTIFICATE
CERTIFICAT DE RECEPTION
nach / according to / suivant
**EN 10204-3.1**

Dokumente-Nr. / Document number / Numéro de document: 09.03.2012
**1000373116 /**

Seite / Page / Page
**1 / 1**

Oberschlesienstrasse 16, 47807 Krefeld

Kunden/Empfänger / Customer/Consignee / Acheteur/Destinataire
THYSSENKRUPP STAINLESS, BANNOCKBURN,

Kundenbestellnr. / Customer's order number / Numéro de la commande client
51003436 - P291605

Herstellungsauftr. / Manufacturer's order no / N° de la commande de fabrication
900425134 / 007

Lieferscheinnr. / Delivery note no. / Ann. d'expédition N°.
87428392 / 020

Erzeugnis / Product / Produit
BLECH/SHEET/TOLE

Lieferbedingungen / Terms of delivery / Conditions de livraison
ASTM A 666-10
SAE AMS 5513 J
ASTM A 240/A 240M
ASME SA 240/SA 240M Sec.II Part A Ed.2010 Add.11

Werkstoff und Güteklasse / Steel grade and quality / Nuance de l'acier
Type 304

| Kundenartikelnr. / Customer's material number / N° de matériel du client | Name des Erzeugnisses (Dicke / Breite / Länge) / Product dimensions (Thickness / Width / Length) / Dimensions du produit (Épaisseur / Largeur / Longueur) | Hersteller / Manufacturing process / Mode d'obtention | Zustand / Condition / État |
|---|---|---|---|
| | 0.0579 inch x 48.0000 inch x 96.0000 inch | AOD | 1Dr / 2B |

| Paket-Nr. / Package No. / N° Paquet | Stückzahl / No of pieces / N° de pièces | Ist-Gewicht / Actual weight / Poids réel | Charg.-Nr. Erzeugnis / Heat No of product / Charg. N° du produit | Gießerei-Nr. / Cast number / N. de la coulée | Proben-Id. / Sample Id. / Échantillon | Proben-Id. / Sample Id. / Échantillon |
|---|---|---|---|---|---|---|
| 8420977 | 64 | 4.903 lbs | 246433 | 871188 | 1002598420 | 1002598421 |
| 8420978 | 64 | 4.903 lbs | 246433 | 871188 | 1002598420 | 1002598421 |
| | 128 | 9.806 lbs | | | | |

SL

Chemische Zusammensetzung / Chemical composition / Composition chimique

| Gießerei / Cast no. | % C | % Si | % Mn | % P | % S | % Cr | % Ni | % N | % Mo | % Cu |
|---|---|---|---|---|---|---|---|---|---|---|
| 871188 | 0.035 | 0.42 | 1.28 | 0.032 | 0.0010 | 18.15 | 8.01 | 0.055 | 0.15 | 0.44 |

Prüfung/Inspection / Lot / Probe-Id. / Sample Id. / Échantillon / Heat treatment / Traitement thermique: QUER

| Probe-Id. / Sample Id. / Échantillon | YS0,2% PSI | YS1,0 PSI | TS PSI | El.A2" % | HV HV | HRB HRB |
|---|---|---|---|---|---|---|
| 1002598420 | 44380 | 48296 | 92820 | 57.2 | 169 | 83.0 |
| 1002598421 | 47570 | 51341 | 94561 | 52.0 | 177 | 85.0 |

Bestätigt gegen Werkstf. Nr./Prüfvorschrift / Conforme à la nuance/Prescrit à la nuance. Intercrist.: EN ISO 3651-2 I.O.

ASTM A 262 PRACTICE E I.O.

Maße-Oberfläche/Dimensions/Surface/Dimensions-Surface I.O.

Verwendungsprüfung (Spezialanwendung/Test of material/specimen on request/Contrôle d'identification (preuve spéciale)): I.O.

WAERMEBEHANDLUNG : 1050 GRAD C / LUFT

TRAITEMENT TERMIQUE : 1050 GRAD C / AIR

HEAT - TREATMENT : 1050 DEGREE / AIR

TKN M871188.PDF

Anwender der Bescheinigung / Originator of the document / Auteur du document

Stempel des (der) Abnahmebeauftragten / Receiving agent's stamp / Timbre de l'agent réceptionnaire

QA

Datum der Ausstellung / Date of issue and validation / Date d'émission et validation: 09.03.2012

BÖLLINGHAUS STEEL

Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade — EN 10204:2004 / 3.1

No.: / Nr.: /Nr.: 0000080907

Böllinghaus Portugal Aços Especiais, SA
DIN EN ISO 9001:2008
TÜV CERT No. 01 100 030458

| Unsere Interne Verweisung /Our Int. Ref/ N/ ref int | Datum / Date / Data |
|---|---|
| 6600015702 000060 | 24.04.2012 |

## Normen / Standards / Normas

TP 304/304L acc. to ASTM A479/A479M-11, A276-10 specifications acc. to latest rev.: SAE-AMS-QQ-S 763B, AMS5639H, AMS5647J, ASME SA479/SA479M, ASME SA276, ASTM A182/A182M-11a F304/304L, A193/A193M-11a CL.1Gr.B8, ASTM A314-06, ASTM A320/A320M-11a, DOD-F24669/6, ASME SA182/SA182M, ASME SA 193/SA193M, ASME SA320 CL.1Gr.B8, ASTM A262-10 Practice A&E, grain size as per ASTM E112-96e1,NACE MR 0175,ASTM A484/A484M-11.

| Kunde / Customer / Cliente | Endgültiger Kunde / Final Customer / Cliente Final |
|---|---|
| | |

| Bestell Nr./Order Nr./ Enc.Nr. | Bestell Nr./ Order Nr./ Enc.Nr. |
|---|---|
| C82998 | C82998.16 |

| Prüfgegenstand / Product / Produto | Gewicht / Weight / Peso | Bunde / Bundle / Atados |
|---|---|---|
| AISI 304/304L FLAT 2 1/2 x 3/4" | 2,081 lb | 01 |

| Werkstoff-Nr. Material-no. Qualidade | Werkstoff-Normbezeichnung / Material standard grade / Norma do material |
|---|---|
| 1.4307 | X 2 CrNi 18-9 |

## Beschreibung / Description / Descrição

Stainless steel flat bars, hot rolled, solution annealed, straightened, pickled.
US DFAR 252.225-7014: MELT SOURCE: United Kingdom / MFG: Portugal.

| Schmelzen Nr. Cast no. / Fundo nr. | Chemische Analyse in % / Chemical composition in % / Analise quimica em % | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 550632 | C: | 0.022 | Si: | 0.300 | Mn: | 1.790 | P: | 0.034 | S: | 0.027 | Cr: | 18.300 | Ni: | 8.110 |
| EAF | Mo: | 0.300 | Co: | 0.193 | Cu: | 0.370 | N: | 0.077 | Ti: | 0.001 | W: | - | V: | - |

| Proben Nr. Test no. Ameatre no. | ASTM E399 Kerbschlagarbeit Impact Test Resilência (Charpy V) [J] | ASTM A370 Streckgrenze Yield point Tensão limite Rp 0,2 % [Ksi] | Dehngrenze 1% point Limite de extensão Rp 1,0% [Ksi] | Zugfestigkeit Tensile strength Tensão de ruptura Rm [Ksi] | Dehnung Elongation Alongamento A (A50-50mm) [%] | Einschnürung Reduction of area Coef. Estricção Z (A50-50mm) [%] |
|---|---|---|---|---|---|---|
| 3027727.01.01 | 181.0 | 63.4 | 67.9 | 95.6 | 66.1 | 75.4 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| Visuelle Kontrolle Visual inspection Inspecção visual: Ok | ASTM E370 Härte Hardness Dureza: 212 [HB] | ASTM A262-10 Practice E Korrosionsbeständigkeit IG Test Corrosão intercristalina: Ok | Wärmebehandlung Heat treatment Tratamento térmico: Annealed Quenched 1900 °F (water quenched) |
| ASTM A484 Maßkontrolle Dimensional inspection Inspecção dimensional: Ok | E 112-96e1 Korngröße Grain size Tamanho de grão: 7 | Werkszeugnisaussteller Quality Control Representative Inspector de Qualidade: David Reis | |
| Verwechslungsprüfung Test of identity Teste de identificação: Ok | Kristallographische Untersuchung Micrographic test Material free from segregation defects: Ok | | |

## Bemerkungen / Remarks / Observações

Micrographic test: approved.
Material is free of radiation contamination.
No weld repair done.
Material is free of mercury.

## Böllinghaus Portugal - Aços Especiais, SA

Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht.
We confirm that this material meets the specification according the mentioned standards.
Confirmamos que este material respeita as especificações de acordo com as normas referidas.

125.K PP

145257

**ALUMINUM** Bell in Cust

# CERTIFIED TEST REPORT

| CUSTOMER PO NUMBER: | CUSTOMER PART NUMBER: | PRODUCT DESCRIPTION: | | | |
|---|---|---|---|---|---|
| C65167-2 | M20/STK | | | | |
| ORDER NUMBER: | LINE ITEM: | SHIP DATE: | LOT NUMBER: | ALLOY: | TEMPER: |
| 616889 | 002 | 03/27/2012 | Z00168036 | 6061 | T6511B |
| WEIGHT SHIPPED: | QUANTITY: | B/L NUMBER: | DIAM/DAF/THKNS: | WIDTH: | LENGTH: |
| 999.000 LB | 14.000 PCS | 603005 | | | 12.000 FT |
| SHIP TO: | | | SOLD TO: | | |

## Actual Physical Properties R6E92276-277

| REFERENCE | DASH# | SAMPLE# | UTS (KSI) | YTS (KSI) | ELONG% | HARDNESS | | CONDUCT. | BEND |
|---|---|---|---|---|---|---|---|---|---|
| Z00168036 | 0001 | 1 | 48.4 | 45.3 | 19.3 | RE | 92 | N/A | N/A |
| Z00168036 | 0001 | 2 | 49.6 | 46.4 | 15.6 | RE | 91 | N/A | N/A |
| Z00168036 | 0002 | 1 | 51.4 | 48.7 | 12.0 | RE | 94 | N/A | N/A |
| Z00168036 | 0002 | 2 | 55.8 | 53.5 | 14.3 | RE | 91 | N/A | N/A |

## Chemical Composition (wt%), Aluminum Remainder

| LIMITS | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Pb | Bi | Zr | Ea | Tot |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum | 0.80 | 0.70 | 0.40 | 0.15 | 1.20 | 0.35 | 0.25 | 0.15 | NA | NA | NA | 0.05 | 0.15 |
| Minimum | 0.40 | 0.00 | 0.15 | 0.00 | 0.80 | 0.04 | 0.00 | 0.00 | NA | NA | NA | 0.00 | 0.00 |
| 101396 | .74 | .36 | .30 | .09 | .94 | .09 | .05 | .03 | .00 | .00 | .00 | .01 | .04 |

## Applicable Requirements:

MANIFOLD BAR, SPECIAL STENCIL PER ASTM-B221-08, STENCILED PER AMS-QQ-A-200/8 ASME-SB221 1998 SECT. II MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

## Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA

**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Alex Yeh, Quality & Technology Manager

Plant Serial: 00036566
Order Number: 616889
Line Item: 002

DART aerospace
Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

# PURCHASE ORDER

**Purchase Order ID** PO17251

**Purchase Order Date** 6/19/12
**PO Print Date** 6/19/12



**Order From :** VC-CAM002

CAMPI STEEL
935 BOUL. DU HAVRE
VALLEYFIELD, QC J6S 5L1
CA

| | | | |
|---|---|---|---|
| **Contact Name** | | **Buyer** | Chantal Lavoie |
| **Vendor Phone** | 800 667 4248 | **Requisition Nbr** | |
| **Vendor Fax** | 450 377 5696 | **Tax Resale Nbr** | 10127-2607 |
| **Vendor Account Nbr** | | **Terms** | Net 30 |
| | | **Currency** | CAD |
| | | **FOB** | Destination-Collect |

**Ship To :** DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED 6/20/12 e-mail

| Line Nbr | Reference / Revision ID / Vendor Part Number | Description/ Mfg ID | Req Date/ Taxable | Req Qty/ Unit of Measure | Ship Method | Unit Price | Extended Price |
|---|---|---|---|---|---|---|---|
| 1 | M303B1.000X2.000 | 303 BAR 1" X 2" | 6/27/12 Yes | 12.00 f | Yours ppd | $53.9000 | $646.80 |
| 050 | | | | | | | |
| | | **Special Inst:** | MATERIAL: AISI 303 SS BAR AS PER ASTM A582<br>NOTE: AISI 304/316 NOT ACCEPTABLE | | | | |
| 2 | M304S16GA | 304/316 Sheet .063 | 6/22/12 Yes | 320.00 sf | Yours ppd | $6.5087 | $2,082.78 |
| 620 | | | | | | | |
| | | **Special Inst:** | MATERIAL: AISI 304/316 SS SHEET ANNEALED 2B FINISH<br>AS MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316)<br>OR ASTM A240 OR ASME SA240 | | | | |
| 3 | M304B0.750X2.500 | 304 BAR .750 X 2.50 | 6/22/12 Yes | 24.00 f | Yours ppd | $27.3000 | $655.20 |
| 630 | | | | | | | |

Confirmed 6/19/12 JL

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required - YES NO

**Change Nbr:** 2 **Change Date:** 6/19/12

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

# PURCHASE ORDER

**Purchase Order ID** PO17251

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CA

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|---|---|---|---|
| **Contact Name** | | **Buyer** | Chantal Lavoie |
| **Vendor Phone** | 800 667 4248 | **Requisition Nbr** | |
| **Vendor Fax** | 450 377 5696 | **Tax Resale Nbr** | 10127-2607 |
| **Vendor Account Nbr** | | **Terms** | Net 30 |
| | | **Currency** | CAD |
| | | **FOB** | Destination-Collect |

**Special Inst:** MATERIAL: AISI 304/316 SS BAR OR
AISI 304/316 SS PLATE
AS PER ASTM A276 OR ASTM A240

(NOTE: AISI 303 NOT ACCEPTABLE)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | M6061T6B2.000X02.250 | 6061-T6 Bar 2.00 x 2.25 | 6/27/12<br>Yes | 12.00<br>f | Yours ppd | $14.8000 | $177.60 |

**Special Inst:** MATERIAL: 6061-
T6/T651/T6510/6511/T62 ALUMINUM
BAR
AS PER QQ-A-225/8 OR ASM-QQ-A-225/8
OR AMS 4117/4128/4115/4116
OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR
AMS 4160 OR ASTM B211
OR B221

MATERIAL: 6061-T6 BAR 2.000" X
2.500" IS ACCEPTABLE

Pa 6/29

**PO Total:** $3,562.38

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

SL

No substitution or deviation without consent.
Certificate of Conformity or Material Certification required - YES NO

**Change Nbr:** 2 **Change Date:** 6/19/12